

## OPTICAL PHENOMENA.

*Mirage*.—This phenomenon was observed on the 6th, 7th and 29th at New London, Conn.; 10th, Sandy Hook, N. J.; 19th and 20th, Ellinwood, Kan.

*Solar Halos* have been observed on the 1st in R. I.; 2d, Ga., Wis., Va., Ill.; 3d, R. I., Ga.; 4th, Ga.; 5th, Conn., N. J.; 6th, Mich., Cal.; 7th, Me., Ohio, Wis., Penn., Nev., Ill.; 8th, Ill., Me., Neb., N. Y., N. J.; 9th, Mich., N. Y., Wis., Kan.; 10th, Ohio, Utah, N. J., Ga., Nev.; 11th, Kan., Ala.; 12th, N. Y., Ohio, La.; 13th, Mich., N. Y.; 14th, Iowa, N. H., N. Y.; 15th, Me., N. Y., Ohio; 16th, N. Y., Ohio; 17th, Del., N. J.; 18th, Dak.; 19th, N. Y., N. C., Ga.; 20th, Me.; 21, Ill., Iowa, Ohio, Wis., N. M., N. C.; 22d, Miss., N. Y., Ohio, Iowa, Tex.; 23d, N. Y.; 24th, Ga.; 25th, N. Y., Ohio, Wis., N. J.; 26th, Ohio, Neb.; 27th, Ill.; 28th, N. H., Me., Fla.; 29th, Ind., Me., N. Y., Ohio, Iowa, Ga.; 30th, Ill., Iowa, Mich., N. Y., Ohio, Penn., Me., Minn., N. C.

*Lunar Halos* have been observed on the 1st in Ga., Mich., Wis., Ind. T., Va., Ill.; 2d, Ohio, S. C., Ill., Mich., Va., W. Va., N. Y., Miss.; 3d, Ill., N. Y., N. C., N. J.; 4th, Iowa, Ill.; 5th, Ill., N. C.; 6th, Ill., N. C.; 7th, Ky., N. H., N. Y., N. C., Nev.; 8th, N. Y., N. C.; 10th, N. J., Conn., Mich., N. Y.; 11th, Kan., 14th, Me.; 15th, Conn.; 24th, N. C.; 25th, Iowa, Wis., N. J., Ga., Kan., Tenn., N. C., Ohio; 26th, Mass., N. J., Ga., Fla., Kan.; 27th, N. J., Wis., Kan., N. Y.; 28th, Ill., Iowa, Mass., Fla., Tenn., Ala., Ga.; 29th, Ill., Iowa, Penn., Va., S. C., N. C., Kan., Fla., Tenn., Ga., Miss.; 30th, Iowa, N. H., Penn., Wis., N. Y., Ill., N. C., Miss.

## MISCELLANEOUS PHENOMENA.

*Zoological*.—*Swallows* appeared on the 8th at Mt. Washington, N. H.; returned on the 4th to Coalville, Utah. *Cuckoos* first appeared on the 2d at West Charlotte, and on the 10th at Strafford, Vt. *Colorado Beeltes*, on the 20th, appeared at Dumbarton, N. H.; 9th, New London, Conn.; 20th, Florida, Mass.; 12th, Fall River, Mass.; abundant during month near Detroit and doing much damage at Litchfield, Mich.; 4th at Auburn, and 11th at Contoocookville, N. H.; numerous at Ardenia, N. Y., Tarentown, Penn., and Embarrass, Wis. *Grasshoppers* at Pembina, D. T., but few appeared during the month; at Las Vegas, N. M., appeared 19th; Virginia City, M. T., 30th innumerable throughout Territory, 27th began to fly; June 28th, a letter from Windon, Cottonwood co., Minn., states that every grasshopper examined is troubled by a red-fly parasite; they are rapidly dying, and probably not a single one will survive to lay its eggs. A similar statement has been made by Dr. Bell, of Colorado Springs, who states that flocks of grasshoppers, in various parts of the country, are suffering from the attacks of this parasite; and Mr. Thomas Belt, the entomologist, advises that the infected insects be widely distributed, so as to check the increase of grasshoppers. *Crickets* heard on the 2d at Contoocookville, N. H. *Katy-Dids* first seen on the 30th at Gilmer, Tex. *Tobacco Worms* appeared on the 25th at Benettsville, Ky. *Gooseberry and Currant Worms* destructive on the 6th at Shelburne, N. H. *Locusts* first seen on the 29th at Gilmer, Texas. *Fire-flies* first seen on the 11th at Freehold, N. J.; 7th, Monticello, Iowa, and Decatur, Ill.; 3d, Morgantown, W. Va.; 25th, Afton, Iowa; 6th, Cornish, Me.; 1st, Northport, Mich.; 8th, Palermo, N. Y., 11th, Flushing, N. Y.; 2d, Wooster, Ohio; 17th, Woodstock, Vt.; 5th, Salem, W. Va.; 9th, Embarrass, Wis. *Tree Toads* first heard on the 9th at Monticello, Iowa.

*Botanical*.—*Apple trees* in bloom on the 7th at Standish, Me.; 4th, Florida, Mass., and Shelburne, N. H.; 1st, Strafford, Vt. *Lilacs* in bloom on the 4th at Shelburne, N. H.; 2d, Palermo, N. Y. *Locust trees* in bloom on the 11th at Palermo, N. Y. *Cotton* in bloom on the 9th at Monticello, Ark.; crop "promising" at La Grange, Tenn.; crop looks well at Clarksville, Tex. *Catalpa* in flower on the 7th at Peroria, Ill. *Dahlias* in bloom on the 10th at Hot Springs, Ark. *Syringa* in blossom on the 5th at Southington, Conn. *Green Peas* ripe 20th at Jacksonburg, Ohio; 7th, Abington, Ill. *Cherries*—May cherries ripe on the 19th at Jacksonburg, Ohio; May Dukes ripe on the 7th at Fallston, Md.; ripe 13th at Abington, Ill.; 17th, Ft. Madison, Iowa; 8th, Vineland, N. J. *Currants* ripe on the 21st at Jacksonburg, Ohio. *Raspberries* ripe on 15th at Abington, Ill.; 23d, Ft. Madison, Iowa; 25th, Burlingame, Kas. *Blackberries* in bloom on the 24th at Florida, Mass.; 12th, Palermo, N. Y. *Strawberries* in bloom on the 1st, and ripe on the 23d, at West Charlotte, Vt.; ripe on the 5th at Abington, Ill.; 1st, Ft. Madison, Iowa; 15th, Shelburne, N. H. *Gooseberries* ripe on the 10th at Benettsville, Ky. *Whortleberries* in bloom on the 1st at Auburn, N. H. *Roses* in bloom on the 2d at Independence, Iowa. *Wheat*—harvest began on the 20th at Havana, Ill., and on the 23d at Carlisle, Penn.; crop very fine at Litchfield, Mich.; ripe on 22d at Vineland, N. J.; wheat, oat and barley crops all in at Clarksville, Tex.; winter wheat harvested on the 26th at Jacksonburg, Ohio; wheat is ripening, fair crop of oats and grass, light crop of fruit on the 30th at Ruggles, Ohio; harvest of winter barley

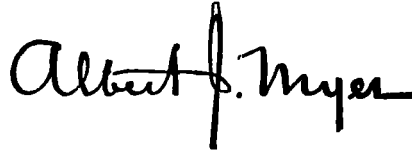
began 19th at Jacksonburg, Ohio. *Corn* in silk on the 27th at Abington, Ill.; ripe on the 16th at New Orleans, La.; crop "promising" at La Grange, Tenn., Clarksville and Melissa, Tex. *Grasses*—*red clover* in bloom on the 19th at Abington, Ill.; crop promising at Melissa, Tex.; *timothy* in bloom on the 21st at Abington, Ill. *Chestnut trees* in bloom on the 26th at Abington, Ill.; horse chestnuts in bloom on the 1st at Auburn, N. H.

*Forest Fires*—are reported near Freehold, N. J.

*Polar Bands*—were observed on the 6th at Wilmington, N. C.; 9th, Freehold, N. J.; 20th, Vicksburg, Miss.; 10th and 24th, Guttenberg, Iowa; 5th, Fayette, Miss.; 28th and 29th, Carthagena, Ohio; 24th, Wytheville, Va.

*Meteors*—are reported on the 2nd, in Ill.; 8th, Ohio; 9th, Ill.; 10th, Ill., N. C.; 11th, N. M., N. Y.; 16th, La., Miss.; 18th, Dodge City, Kan., and Ellsworth, Kan.; 19th, Ohio; 20th, Ind., Ky.; 21st, Mich., Ga., N. Y.; 23rd, Tenn., R. I.; 24th, Iowa, Md.; 25th, La., Ill., Iowa; 26th, Mass., Ohio; 28th, Ind. Ter., Wis.

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